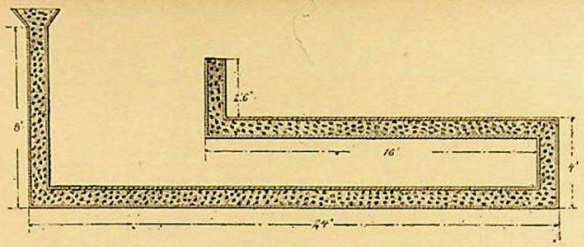
taking.

The ultimate object of the present invention is no less than the provision of a means whereby individual workingmen's homes—artistic, comfortable, sanitary, and not monotonously uniform—may be turned out in such quantity and so cheaply that their rent, including car fare to and from the tenant's work, will not exceed, say, nine dollars a month. Mr. Edison hopes thereby to depopulate the swarming tenements of congested cities, and provide their occupants with surroundings morally, mentally, and physically more healthful.

Reinforced concrete is the material adopted; and by Mr. Edison's method, after the erection of suitable molds, an entire house, including walls, floors, roof, molding, cornices, bath and laundry tubs, is "poured" at one operation, much as one might squeeze paint out of a compressible tube and leave it to set.

Rumors of this intention have been in the air for some time, and have been received with more or less incredulity or derision by the technical press, but experiments upon a practical scale have now reached a stage of progress at which Mr. Edison is confident of ultimate success, and permits the present authentic description.

Mr. Edison's first intention was to build a two-family house, and considerable work was done in



Result of test of gravity flow of concrete.

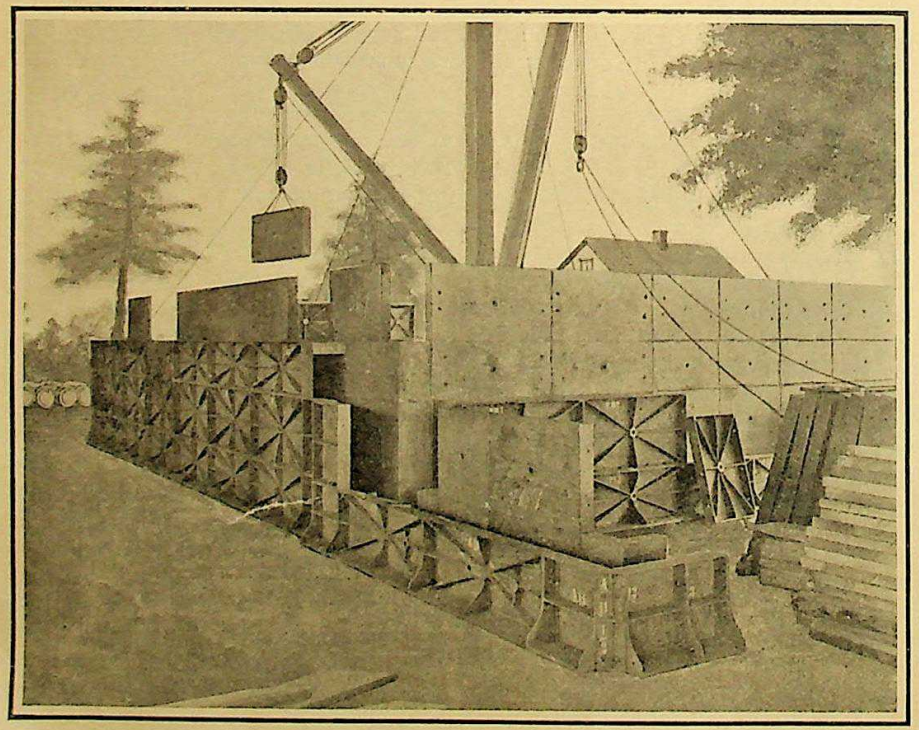
tains two large low attic rooms, but each room has large windows, providing an abundance of light and fresh air. A cellar 7½ feet high extends under the whole house, containing boiler, wash tubs, coal bins, etc.

All the moldings and decorations are cast in the concrete, and not *appliqué* as hitherto in concrete work. Our illustration shows a typical piece of decoration with the mold from which it was cast, such decoration molds being, of course, changeable with each of a row of houses built.

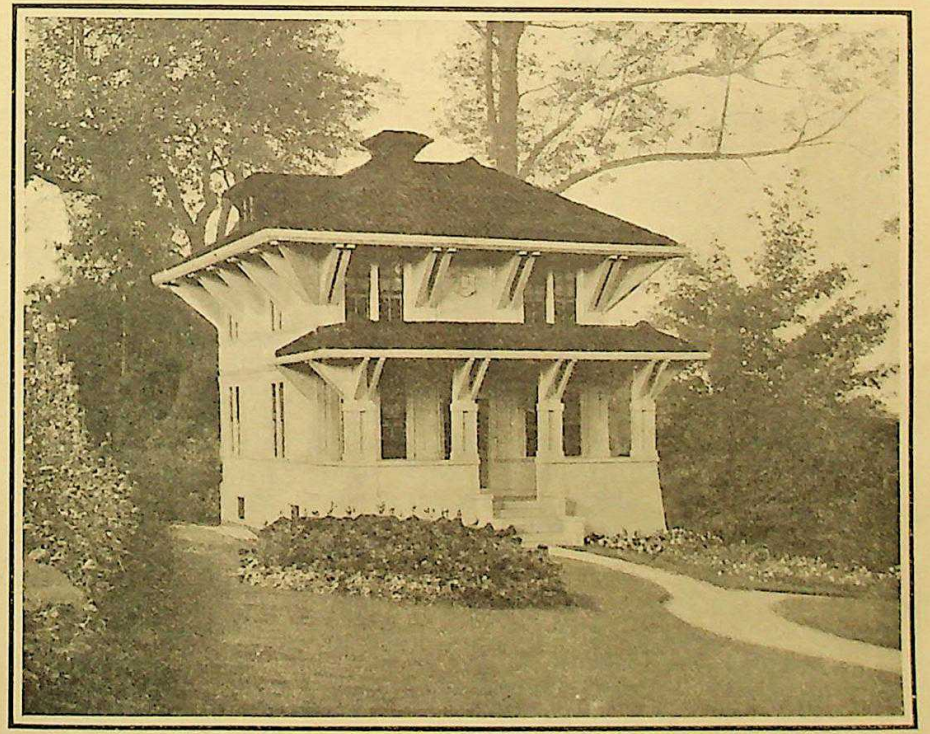
The inside walls require no plaster finish, the special mixture used leaving a perfectly smooth surface, which can be tinted as desired. Only the doors and window frames and the pipes for water, gas, or electing of a house from the top. This result is obtained by the mixture with the concrete of a special colloid, which for the present is Mr. Edison's secret.

The latter thinks it will be possible to assemble the molds complete in four days, to fill the form with concrete in six hours, and, after allowing six days for setting, to remove the molds in another four days. A complete set of molds would therefore be occupied for fourteen days in the building of one house, or would be available for about 21 houses in a year; but owing to the interchangeability of parts, Mr. Edison estimates that with six complete sets of molds, 144 houses may be built in a year.

The greatest care is taken to make all the mold sections interchangeable, a special machine having been designed to plane them uniformly, and all bolt holes in their flanges being drilled to templet. Such are the finish of the molds and the nature of the colloid concrete, that there is absolutely no adherence of the latter to the former. The marks of the joints between the molds are rarely traceable on the finished wall, and the molds may be used over and over again indefinitely. With the present use of wood for forms, it is almost impossible to use the latter over again, owing to breakage and adhesion, and it is cost of the wood that renders the expense of monolithic concrete dwellings prohibitive.



Assembling the cast-iron molds of the "form."



Typical house cast in one piece.

25-131
2202
2+2
12
Div. 15.